

# FBP30

BY

## LIGHTOLIER®

## EMERGENCY FLUORESCENT LIGHTING BALLAST

### INSTALLATION AND OPERATING INSTRUCTIONS

### IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed, including the following:

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

All servicing should be performed by qualified personnel only.

To prevent high voltage from being present on red and yellow output leads prior to installation, battery connector must be open. Do not join battery connector until installation is complete and AC power is supplied to the emergency ballast.

Do not use this equipment outdoors.

This product is designed for use in UL listed indoor fixtures except in air handling, heated air outlet or hazardous locations.

Do not let power supply cords touch hot surfaces.

Do not mount near gas or electric heaters.

Do not mount near open flames or sparks.

Do not install equipment in areas of excessive moisture.

Do not use this equipment for other than intended use.

Do not attempt to service battery. Contact manufacturer for information on service.

This product is for use with most 17W through 215W single pin or bipin fluorescent lamps, including standard, energy saving, HO, VHO, PG17, circline, U-shaped, and 4 pin compact lamps without integral starters.

AN UNSWITCHED AC POWER SOURCE IS REQUIRED. (120 OR 277VAC).

The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

This emergency ballast is for factory or field installation in either the ballast channel or on top of the fixture.

To reduce the risk of electrical shock, disconnect both normal and emergency power supplies before servicing by disconnecting all AC inputs to the fixture and by disconnecting the battery.

### SAVE THESE INSTRUCTIONS

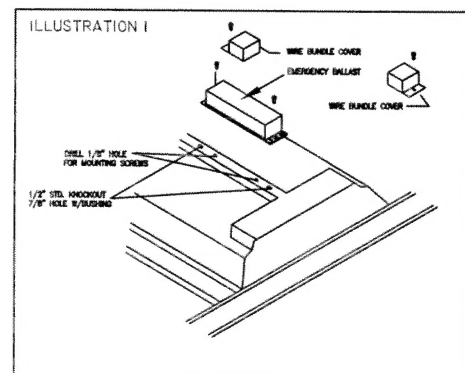
### INSTALLATION INSTRUCTIONS

#### WARNING

To prevent high voltage from being present on red and yellow output leads prior to installation, battery connector must be open. Do not join battery connector until installation is complete and AC power is supplied to the ballast.

**NOTE:** Make sure that the necessary branch circuit wiring is available. An unswitched source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

1. Disconnect AC power from the fixture. Remove the ballast channel cover and install the emergency ballast either on top of the fixture (See illustration 1) in the ballast channel (See illustration 2) or remote from the fixture up to 1/2 the distance the AC ballast manufacturer recommends remoting the AC ballast from the lamp, or up to 50 feet, whichever is less. (See illustration 3).
2. Select the appropriate wiring diagram to connect the emergency ballast to the AC ballast and lamp. Make sure all connections are in accordance with the National Electrical Code and any local regulations.



CONTAINS NICKEL-CADMIUM  
RECHARGEABLE BATTERY.  
MUST BE RECYCLED OR  
DISPOSED OF PROPERLY.



# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

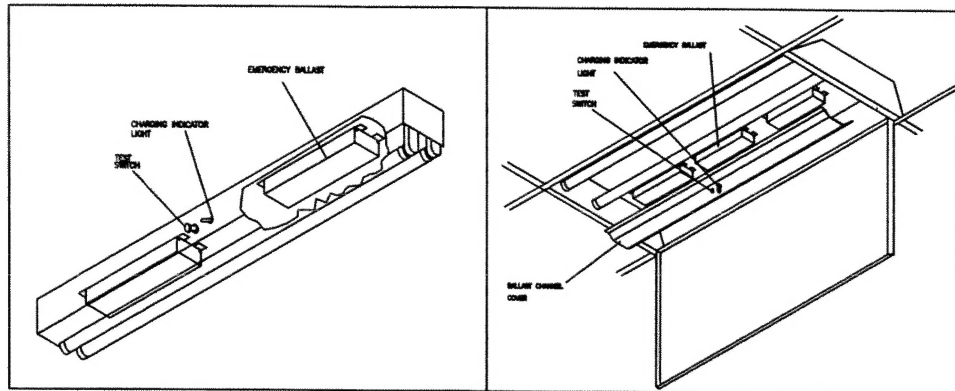


ILLUSTRATION 2

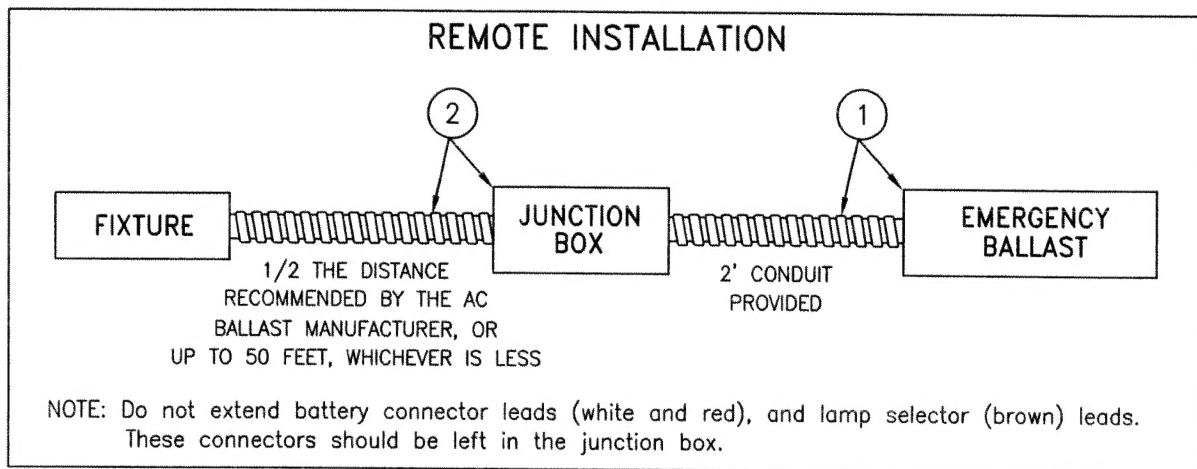


ILLUSTRATION 3

- ① -Emergency ballast with flexible conduit.
- ② -Conduit and junction box (not supplied), but necessary for remote installation.

3. Install the test switch through the ballast channel cover of a troffer or through the side of a strip fixture. Drill a 1/2" hole and install the switch as shown (See illustrations 2 and 4). Wire the test switch so that it removes AC power from both the emergency ballast and the AC ballast at the same time (See illustration 6).
4. Install the charging indicator light so that it will be visible after the fixture is installed (See illustrations 2 and 5).

**NOTE:**  
After installing the charging indicator light and test switch, mark each with the appropriate label. If a detached charging indicator light is used, connect by matching wire colors and install as shown in illustration 5.

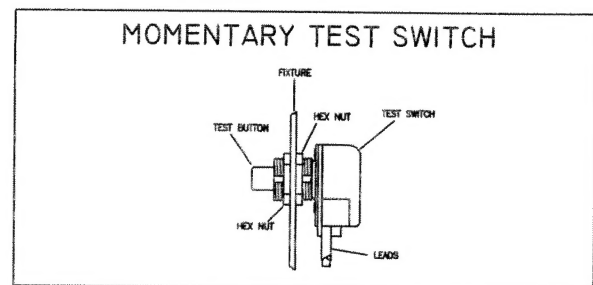


ILLUSTRATION 4

5. In a readily visible location, attach the label "Caution -This Unit Has More Than One Power Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit Or Fuses And Emergency Power Supplies Before Servicing."

# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

NOTE: AFTER INSTALLING THE CHARGING INDICATOR LIGHT AND TEST SWITCH, MARK EACH WITH APPROPRIATE LABEL.

- After installation is complete, supply AC power to the emergency ballast and join the battery connector.

- A short-term discharge test may be conducted after the emergency ballast has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.

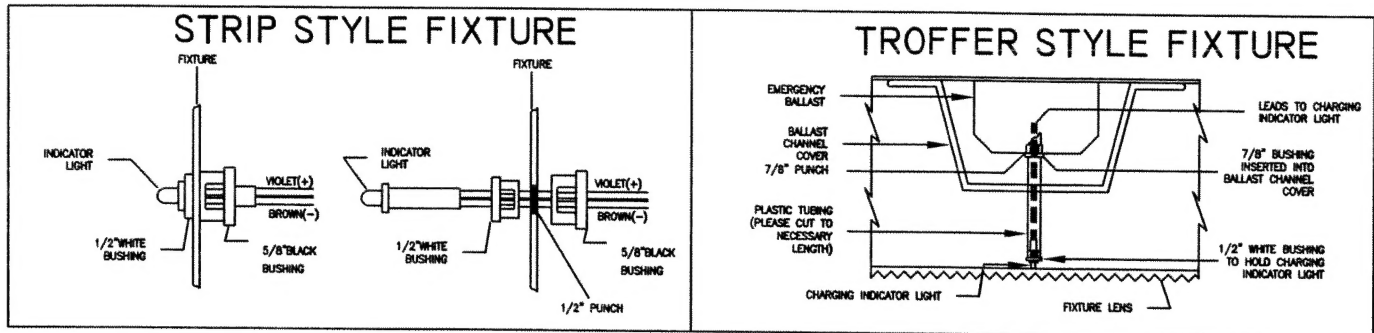


ILLUSTRATION 5

## TEST SWITCH WIRING DIAGRAMS

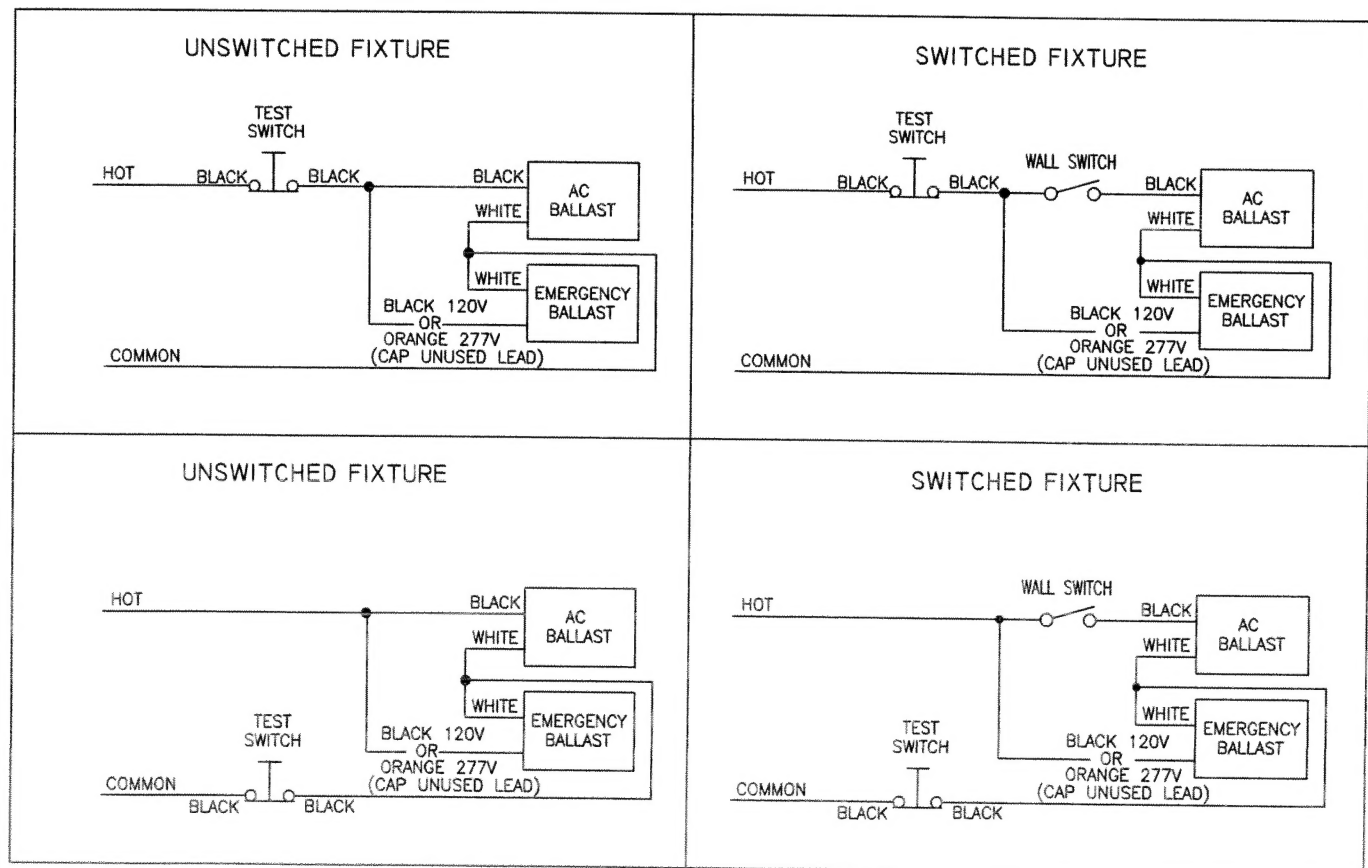


ILLUSTRATION 6

# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

## WIRING DIAGRAMS

### OPERATION

When AC power is applied, the charging indicator light is illuminated, indicating that the battery is being charged. When power fails, the emergency ballast automatically switches to emergency power, operating either one or two lamps at reduced illumination for at least 90 minutes.

### MAINTENANCE

Although no routine maintenance is required to keep the emergency ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

1. Visually inspect the charging indicator light monthly. It should be illuminated.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. Either one or two lamps should operate at reduced illumination.
3. Conduct a 90-minute discharge test once a year. either on or two lamps should operate at reduced illumination for at least 90-minutes.

The following diagrams are typical schematics only. May be used with other ballasts.  
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

**TABLE I**

LAMP DIAMETER	BASE TYPE	POWER (LENGTH)	NUMBER OF LAMPS EMER.	BROWN CONNECTOR
1", 1-1/4", 1-1/2" (T8, T9, T10, T12)	SINGLE OR BIPIN	17-40W (2'-4')	1	CLOSED
			2	OPEN
		40-215W (5'-8')	1	OPEN
LONG COMPACT	4 PIN (2G11)	18-39W	1	CLOSED
			2	OPEN
		40-55W	1	OPEN
COMPACT	4 PIN (G24q, GX24q)	18-42W	1	CLOSED
			2	OPEN

# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

## WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

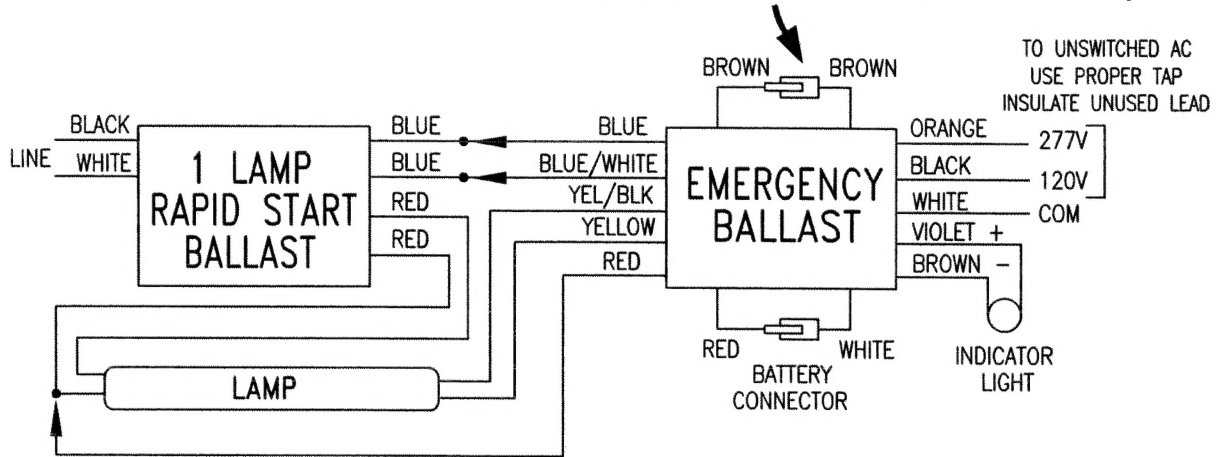
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

The following diagrams are typical schematics only.

## WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

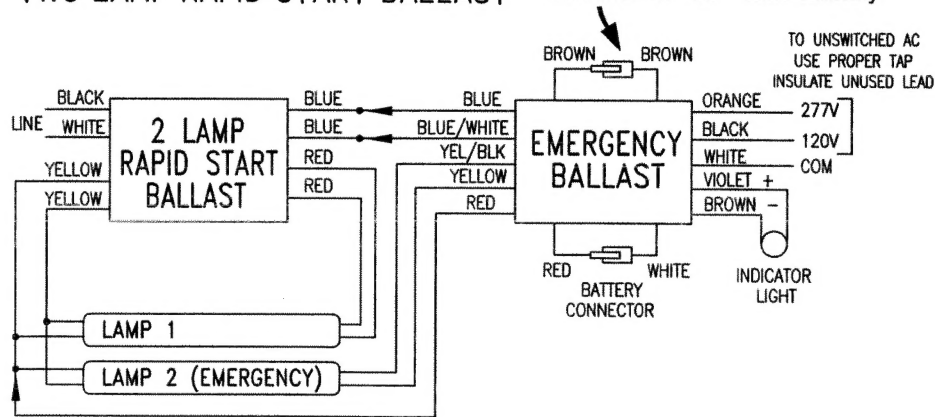
### A. ONE LAMP RAPID START BALLAST

WARNING: See Table 1 before connecting



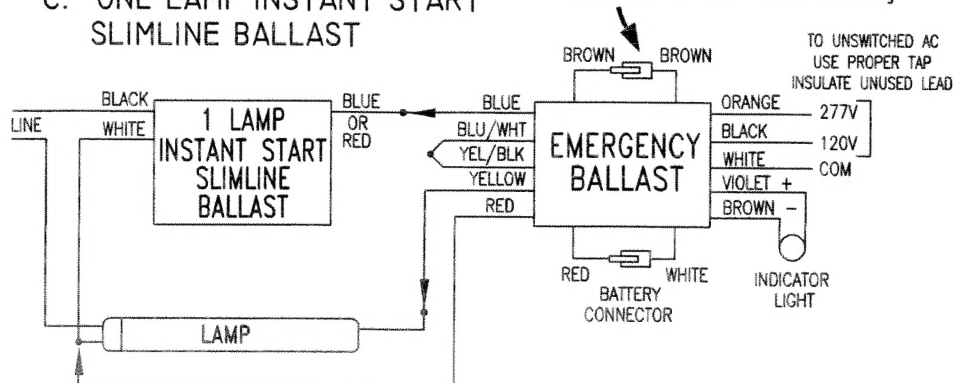
### B. TWO LAMP RAPID START BALLAST

WARNING: See Table 1 before connecting



### C. ONE LAMP INSTANT START SLIMLINE BALLAST

WARNING: See Table 1 before connecting



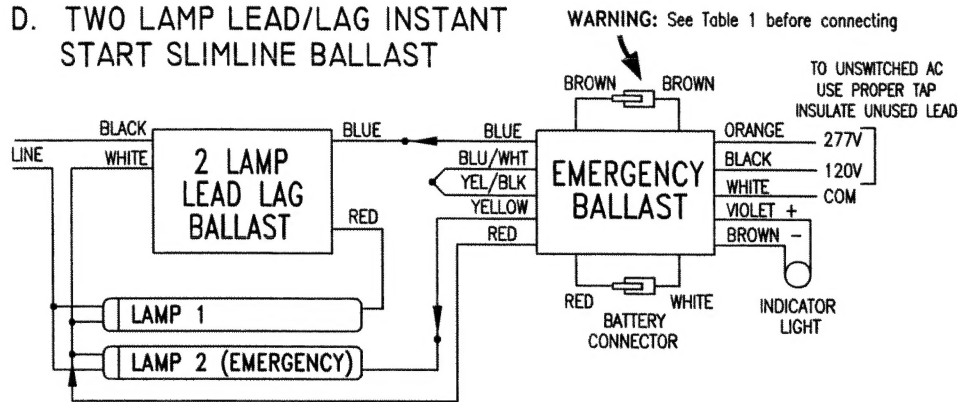
# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

## WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

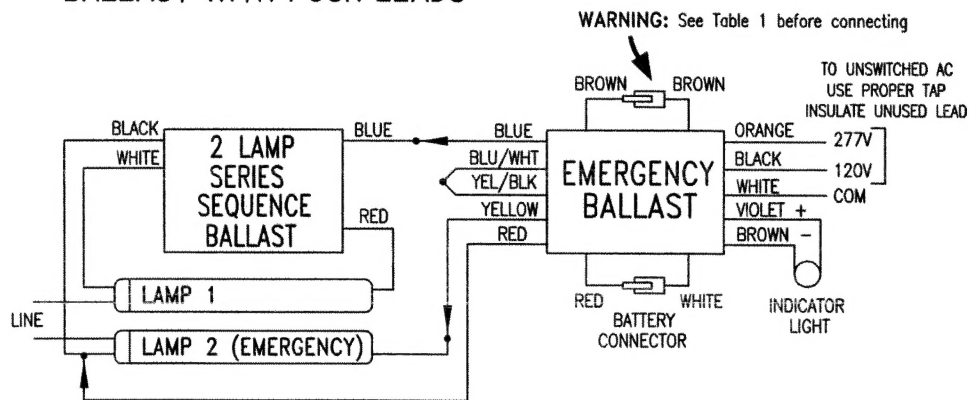
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

The following diagrams are typical schematics only.

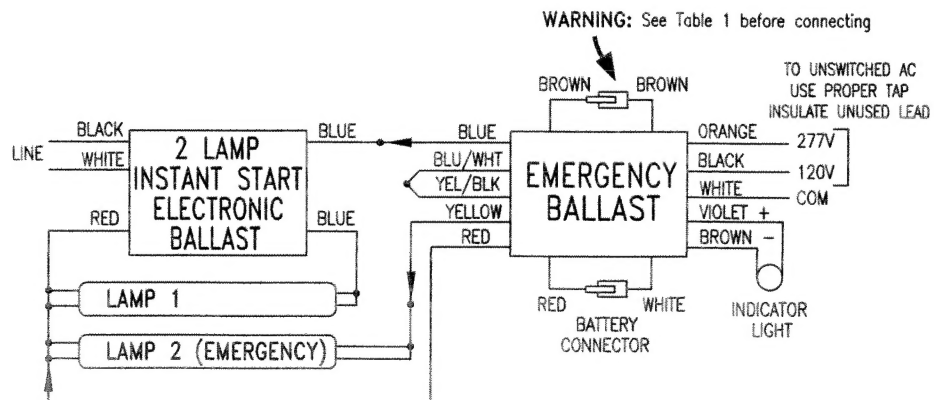
D. TWO LAMP LEAD/LAG INSTANT  
START SLIMLINE BALLAST



E. TWO LAMP SERIES SEQUENCE INSTANT START BALLAST WITH FOUR LEADS



### F. TWO LAMP PARALLEL INSTANT START BALLAST



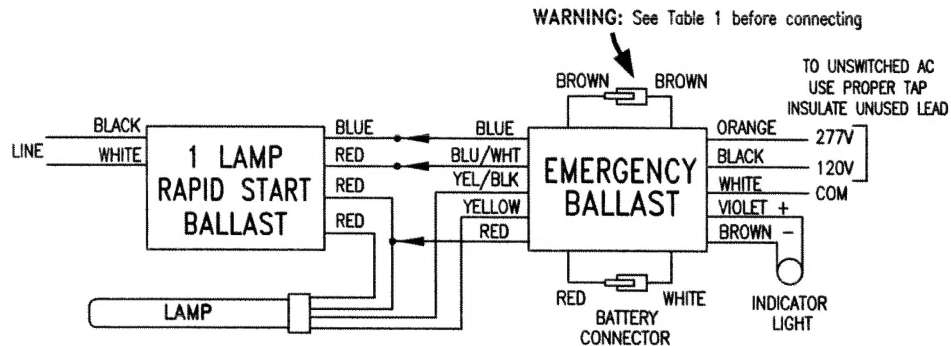
# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

## WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

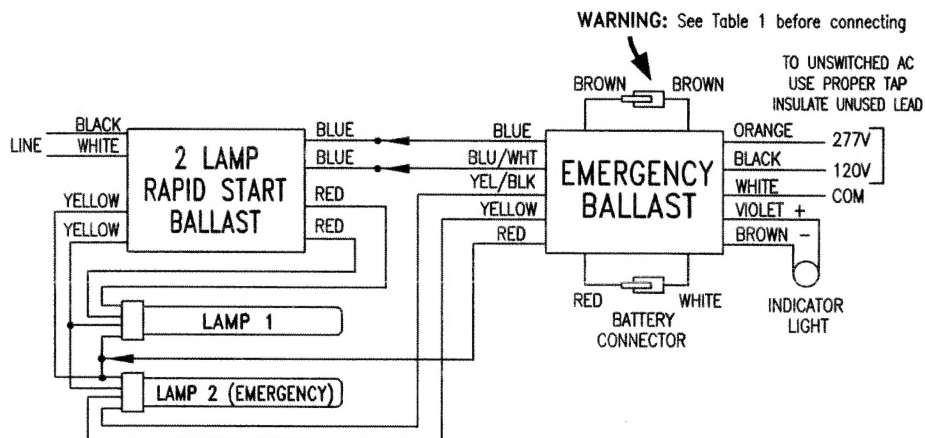
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

The following diagrams are typical schematics only.

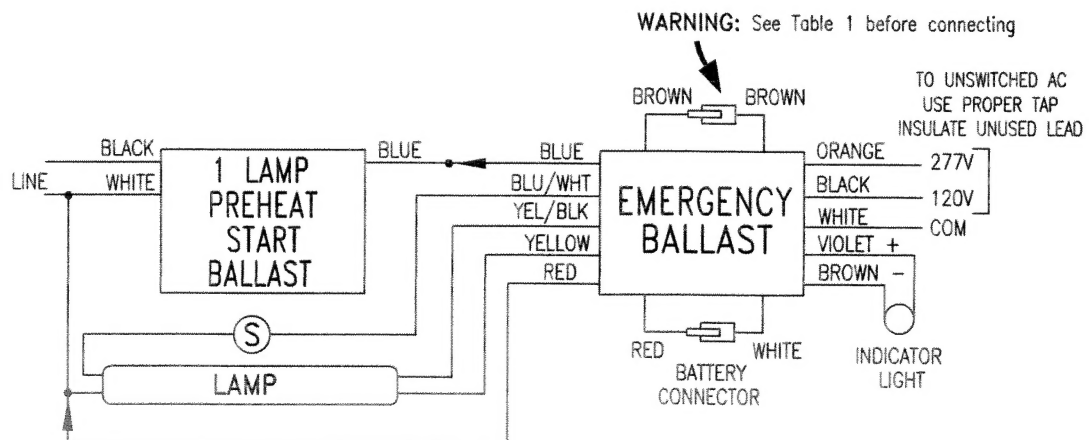
### G. ONE LONG COMPACT LAMP RAPID START BALLAST



### H. TWO LONG COMPACT LAMP RAPID START BALLAST

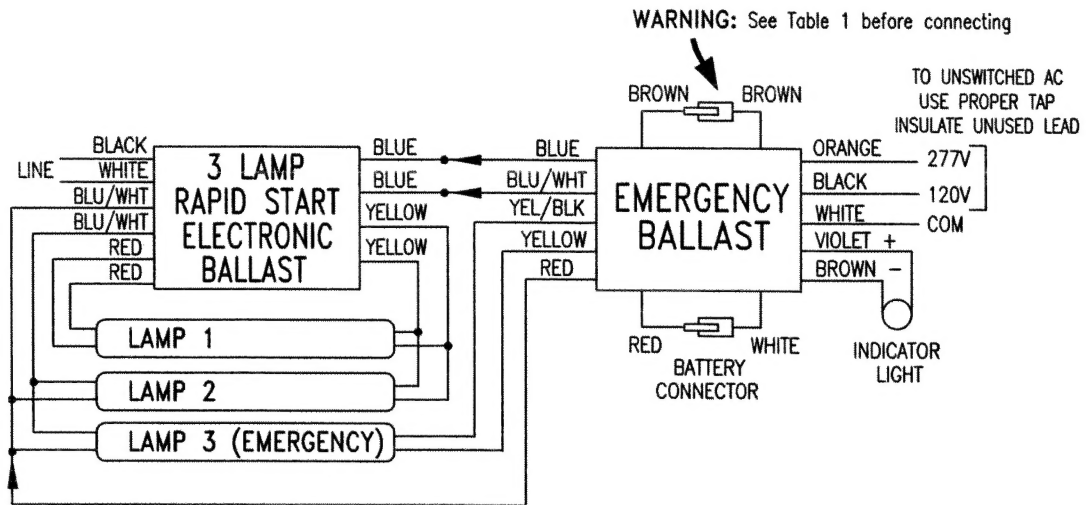


### I. ONE LAMP PREHEAT START BALLAST

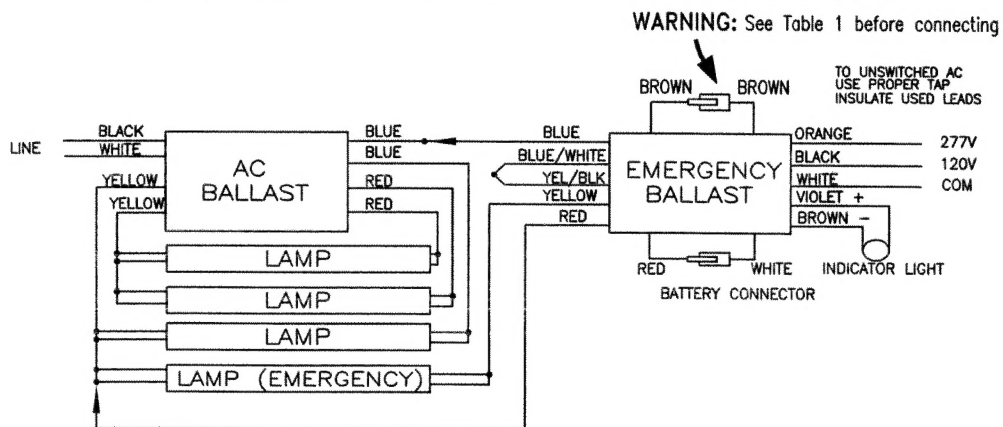


# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

## J. THREE LAMP RAPID START ELECTRONIC START BALLAST



## K. FOUR (4) LAMP INSTANT START ELECTRONIC BALLAST

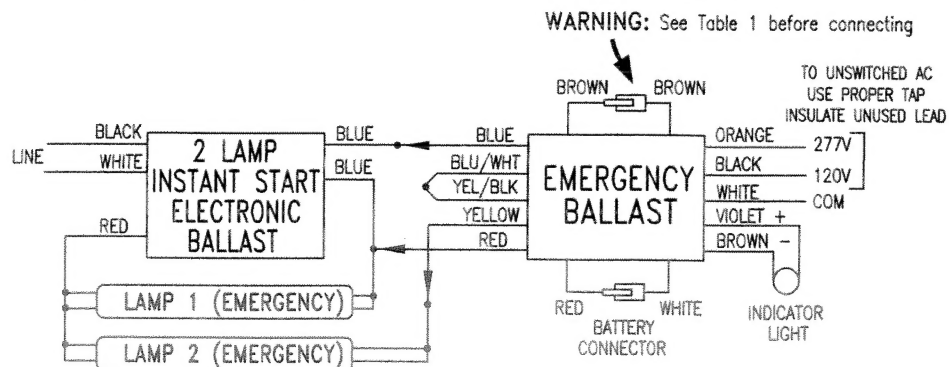


## WIRING DIAGRAMS FOR 2-LAMP EMERGENCY OPERATION

EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

The following diagrams are typical schematics only.

## L. TWO LAMP INSTANT START ELECTRONIC BALLAST





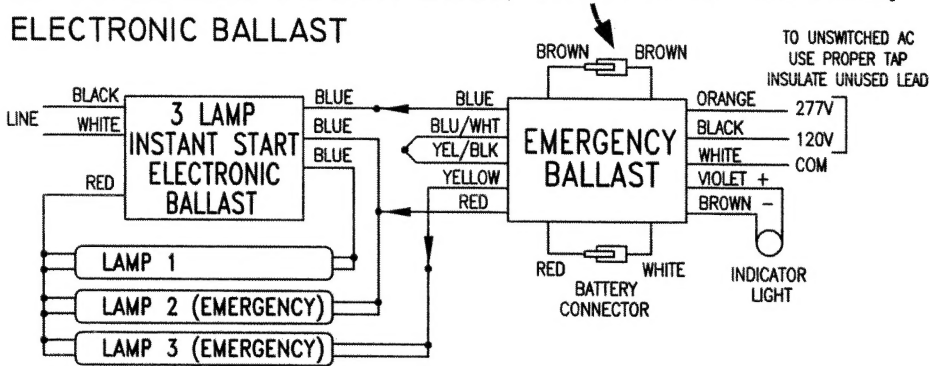
## FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

## WIRING DIAGRAMS FOR 2-LAMP EMERGENCY OPERATION

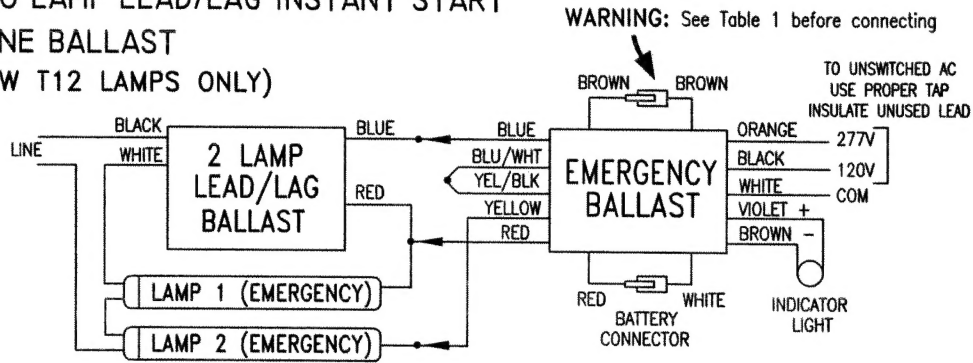
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

The following diagrams are typical schematics only.  
Two lamp operation is not possible with all ballasts.  
Consult the factory for any ballast other than those shown.

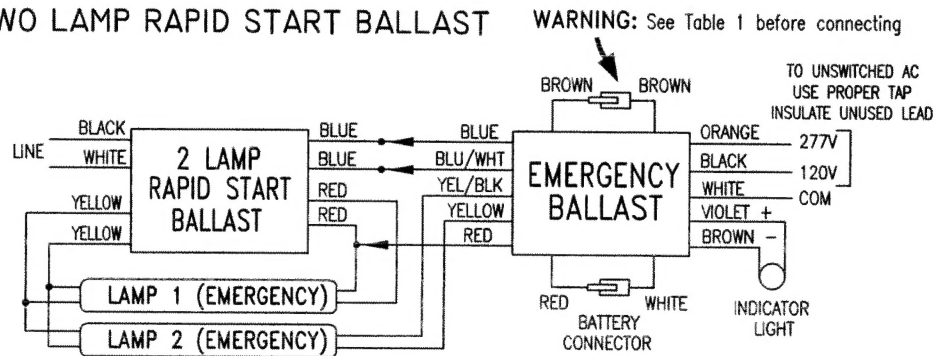
M. THREE LAMP INSTANT START WARNING: See Table 1 before connecting  
ELECTRONIC BALLAST



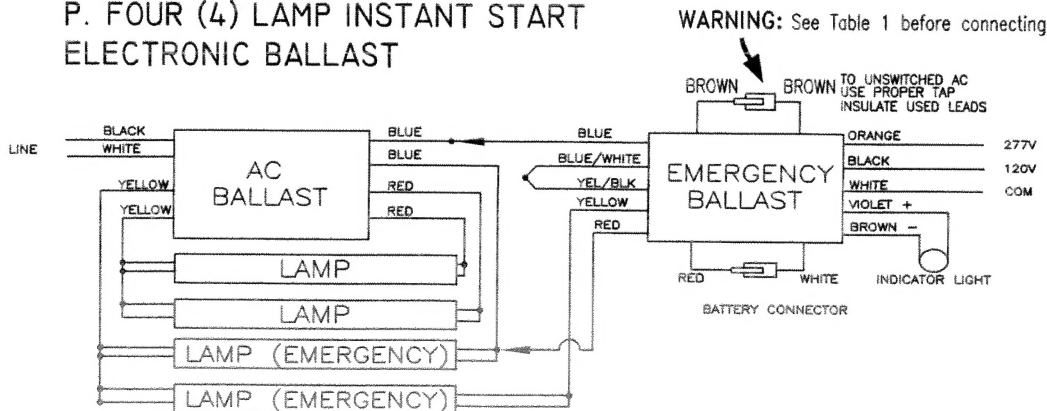
N. TWO LAMP LEAD/LAG INSTANT START  
SLIMLINE BALLAST  
(20-40W T12 LAMPS ONLY)



## 0. TWO LAMP RAPID START BALLAST



P. FOUR (4) LAMP INSTANT START  
ELECTRONIC BALLAST



# FBP30 EMERGENCY FLUORESCENT LIGHTING BALLAST

## WIRING DIAGRAMS FOR 1 OR 2-LAMP EMERGENCY OPERATION

EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

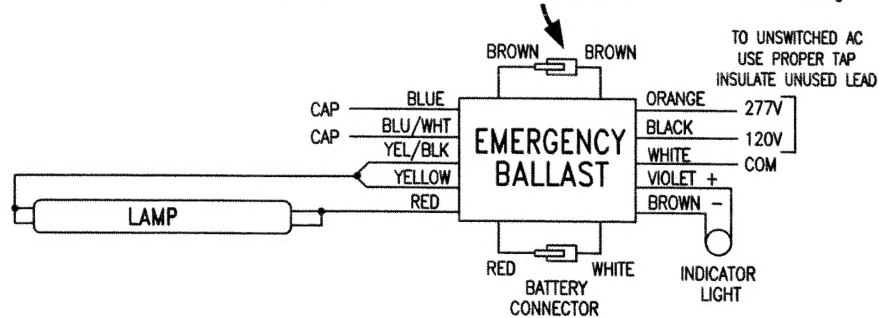
The following diagrams are typical schematics only. Two lamp operation is not possible with all ballasts.

Consult the factory for any ballast other than those shown.

## WIRING DIAGRAMS FOR EMERGENCY ONLY FIXTURES

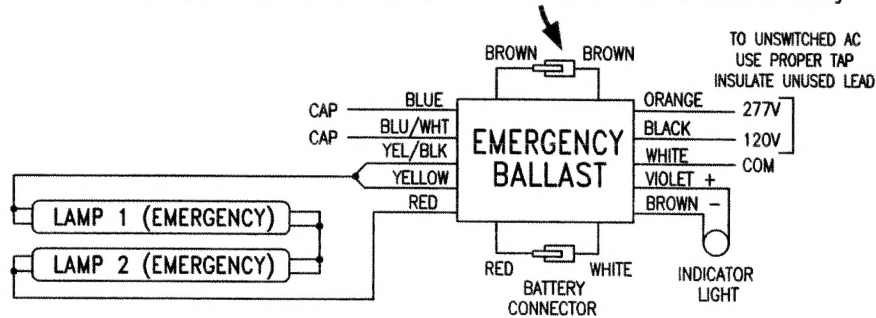
### Q. ONE 17-25W LAMP WITHOUT AC BALLAST

WARNING: See Table 1 before connecting



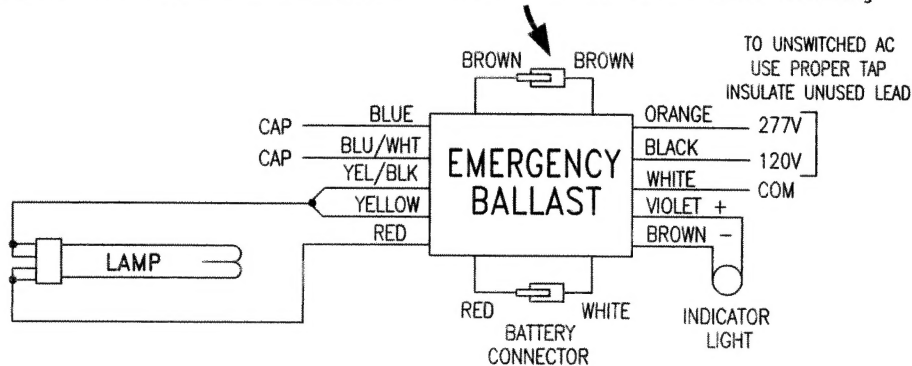
### R. TWO LAMPS WITHOUT AC BALLAST

WARNING: See Table 1 before connecting



### S. ONE LONG COMPACT OR OTHER COMPACT LAMPS (18-55W) WITHOUT AC BALLAST

WARNING: See Table 1 before connecting



### T. TWO LONG COMPACT OR OTHER COMPACT LAMPS (18-42W) WITHOUT AC BALLAST

WARNING: See Table 1 before connecting

